

Applicants: Ponnappakkam Adikesavan Loka Bharathi et al.
Serial No.: 10/645,131
Filed: August 21, 2003
Page 3

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims:

1. (Currently Amended) ~~A Novel~~ An isolated deep-sea bacterium deposited with the National Institute of Oceanography, Goa, India, having accession no. NIOCC isolate #222, and deposited with the ~~Type Culture~~ Microbial Collection and Gene Bank (MTCC) having accession no. MTCC 5114, ~~which has similar properties to known Brevibacterium casei, which isolated deep-sea bacterium was isolated from the deep sea at 5000m depth waters of the Indian Ocean.~~
2. (Currently Amended) ~~Novel~~ The isolated deep-sea bacterium as claimed in claim 1 wherein the isolated deep-sea bacterium is a baroduric (pressure tolerant) on i.e. it is capable of growing both a 500 atm and at 1 atm pressure.
3. (Currently Amended) ~~Novel~~ The isolated deep-sea bacterium as claimed in claim 1 wherein, ~~the~~ a petroleum ether fraction of the isolated deep-sea bacterium ~~when~~ scanned in an UV visible spectrometer shows characteristic peaks at 448nm with shoulders at 430nm and 470nm, which ~~is~~ are similar to the ~~carotenoid~~ characteristic peaks of a carotenoid compound.
4. (Currently Amended) ~~Novel~~ The isolated deep-sea bacterium as claimed in claim 1 wherein, ~~the~~ an alcoholic extract of the ~~said isolated deep-sea~~ bacterium ~~having caratenoids~~ has carotenoid, UV absorption, anti bacterial, and pH indicating properties.

5. (Currently Amended) ~~Novel~~ The isolated deep-sea bacterium as claimed in claim ~~±~~ 4 wherein[,] the extract of the isolated deep-sea bacterium is used ~~in many industrial applications, such~~ as a food and beverages additive and ~~feed additive colour cum~~ preservative.
6. (Withdrawn) A process for the preparation of alcoholic extract of deep-sea bacterium isolated from the Indian costal zones of Arabian sea, said process comprising isolating the bacterium and growing the cells in a medium with salinity ranging from 1.5 to 3% for 3-4 days at 28 \pm 2°C, centrifuging and washing with 1.5% NaCl, extracting with alcohol for 2-3 times and obtaining an extract which shows the properties of carotenoids (yellow/orange colour), UV absorption, antibacterial and pH indicator.
7. (Withdrawn) A process as claimed in claim 6 wherein, the solvent used to extract is methanol.
8. (Withdrawn) A process as claimed in claim 6 wherein, the extract is used as UV (A, B, C) absorbing compound.
9. (Withdrawn) A process as claimed in claim 6 wherein, the extract inhibits growth of Gram-positive and Gram-negative bacteria.
10. (Withdrawn) A process as claimed in claim 6 wherein, the yellow methanolic extract shows reversible colour change, being pink under alkaline and yellow under neutral or acific conditions and is used as a pH indicator.
- 11-12. (Canceled)

Applicants: Ponnappakkam Adikesavan Loka Bharathi et al.
Serial No.: 10/645,131
Filed: August 21, 2003
Page 5

13. (Withdrawn) Use of methanolic extract of novel bacterium for enhancing the colour and shelf life of cheese or yoghurt.
14. (Withdrawn) Use of methanolic extract as claimed in claim 13 wherein, the amount of extract used for enhancing the colour and shelf life of cheese and yoghurt ranging between 0.01 g/kg to 10 g/kg.
15. (Withdrawn) Use of methanolic extract as claimed in claim 13 wherein, the amount of extract used for enhancing the colour and shelf life of cheese or yoghurt is 0.01 g/kg.
16. (Withdrawn) Use of dried methanolic extract for preparation of menaquinone-7-8 containing substance for use in food and beverage.
17. (Withdrawn) Use as claimed in claim 16 wherein, the quality of extract used in the range between 0.0001 to 0.001%.
18. (Withdrawn) A process for preparing menaquinone-7,8 containing substance, said process comprising growing the cells claimed in claim 1, for 2-5 days, harvesting after centrifugation and either spray drying or lyophilizing and using at a concentration ranging between 0.5 to 10% for preventing and treatment of osteoporosis.
19. (Withdrawn) A process as claimed in claim 18 wherein, growing the cells for 4 days before harvesting.